

Translation

PATENT COOPERATION TREATY

PCT

PCT/JP2003/017001



INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference FWA3-34	FOR FURTHER ACTION See Form PCT/IPEA/416	
International application No. PCT/JP2003/017001	International filing date (day/month/year) 26 December 2003 (26.12.2003)	Priority date (day/month/year) 09 January 2003 (09.01.2003)
International Patent Classification (IPC) or national classification and IPC G09F 9/00, H04N 5/64		
Applicant SHARP KABUSHIKI KAISHA		

- This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
- This REPORT consists of a total of 7 sheets, including this cover sheet.
- This report is also accompanied by ANNEXES, comprising:
 - ☒ (sent to the applicant and to the International Bureau) a total of 7 sheets, as follows:
 - ☒ sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).
 - ☐ sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.
 - ☐ (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).
- This report contains indications relating to the following items:
 - ☒ Box No. I Basis of the report
 - ☐ Box No. II Priority
 - ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
 - ☒ Box No. IV Lack of unity of invention
 - ☒ Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
 - ☒ Box No. VI Certain documents cited
 - ☐ Box No. VII Certain defects in the international application
 - ☐ Box No. VIII Certain observations on the international application

Date of submission of the demand 10 June 2004 (10.06.2004)	Date of completion of this report 26 October 2004 (26.10.2004)
Name and mailing address of the IPEA/JP	Authorized officer
Facsimile No.	Telephone No.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International Application No.

PCT/JP2003/017001

Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.

- ☐ This report is based on translations from the original language into the following language _____, which is language of a translation furnished for the purpose of:
- ☐ international search (under Rules 12.3 and 23.1(b))
 - ☐ publication of the international application (under Rule 12.4)
 - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)

2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

- ☐ The international application as originally filed/furnished
- ☒ the description:
- pages _____ 1-39 _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- pages _____ 7-12, 15, 24, 31, 32, 34, 37 _____, as originally filed/furnished
- pages* _____, as amended (together with any statement) under Article 19
- pages* 1-3, 5, 6, 14, 16-23, 25-27, 29, 33, 36 received by this Authority on 02 September 2004 (02.09.2004)
- pages* 4, 13, 28, 30, 35 received by this Authority on 15 October 2004 (15.10.2004)
- ☒ the drawings:
- pages _____ 1-30 _____, as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages _____
- ☐ the claims, Nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

Box No. IV Lack of unity of invention

1. ☐ In response to the invitation to restrict or pay additional fees the applicant has:
- ☐ restricted the claims.
 - ☐ paid additional fees.
 - ☐ paid additional fees under protest.
 - ☐ neither restricted nor paid additional fees.
2. ☒ This Authority found that the requirement of unity of invention is not complied with and chose, according to Rule 68.1, not to invite the applicant to restrict or pay additional fees.

3. This Authority considers that the requirement of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is

☐ complied with.

☒ not complied with for the following reasons:

The common technical feature of the subject matters of claims 1-24, 31, 33, 34 and 37 is an arrangement wherein the insertion/detachable part of a flat display part can be inserted into and drawn out of the receiving hole of the supporting column of a support stand.

The common technical feature of the subject matters of claims 25-30, 33 and 34 is a flat display part having an engaging part capable of engaging with a projected part projected from a wall.

The common technical feature of the subject matters of claims 32-34 is the structure of a flat display part having a rotatable support stand on the back.

The common technical feature of the subject matters of claims 35 and 36 is a structure with a remote-controller holder provided.

Accordingly, those four inventions have only different technical features, and so do not satisfy the requirement of unity of invention.

4. Consequently, this report has been established in respect of the following parts of the international application:

☒ all parts.

☐ the parts relating to claims Nos. _____

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International Application No.

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Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)

Claims

1-37

YES

Claims

NO

Inventive step (IS)

Claims

1-34, 37

YES

Claims

35, 36

NO

Industrial applicability (IA)

Claims

1-37

YES

Claims

NO

2. Citations and explanations (Rule 70.7)

- Document 1: JP, 2000-206901, A (NEC Corp.), 28 July, 2000 (28.07.00)
 Document 2: JP, 5-324123, A (PFU Ltd.), 7 December, 1993 (07.12.93)
 Document 3: JP, 61-621, U (Ricoh Co., Ltd.), 6 January, 1986 (06.01.86)
 Document 4: JP, 11-3043, A (Fujitsu General Ltd.), 6 January, 1999 (06.01.99)
 Document 5: JP, 60-1924, A (Matsushita Electric Industrial Co., Ltd.), 8 January, 1985 (08.01.85)
 Document 6: JP, 54-92718, U (New Nippon Electric Co., Ltd.), 30 June, 1979 (30.06.79)
 Document 7: JP, 10-254581, A (Uchida Yoko Co., Ltd.), 25 September, 1998 (25.09.98)
 Document 8: JP, 2000-241008, A (Hitachi, Ltd.), 8 September, 2000 (08.09.00)
 Document 9: JP, 8-125949, A (Fujitsu General Ltd.), 17 May, 1996 (17.05.96)
 Document 10: JP, 9-6250, A (Sony Corp.), 10 January, 1997 (10.01.97)
 Document 11: JP, 8-272310, A (Citizen Watch Co., Ltd.), 18 October, 1996 (18.10.96)

Claim 1

An insertion/detachable part, one end of which is connected with a display part via a rotatable part that can rotate, is not described in any of the above-mentioned documents.

Accordingly, the subject matter of claim 1 appears to be novel and to involve an inventive step.

Claims 2, 6 and 7

The column part of a support stand having a locking/unlocking mechanism is not described in any of the above-mentioned documents.

Accordingly, the subject matters of claims 2, 6 and 7 appear to be novel and to involve an inventive step.

Claim 3

None of the above-listed documents describes a structure of an insertion/detachable part wherein the inserted top of the said part is formed of an elastic member.

Accordingly the subject matter of claim 3 appears to be novel and involve an inventive step.

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY

International Application No.

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Box No. VI Certain documents cited

1. Certain published documents (Rule 70.10)

Application No. Patent No.	Publication date (day/month/year)	Filing date (day/month/year)	Priority date (valid claim) (day/month/year)
JP 2003-44166 A [P, Y]	14.02.2003	27.07.2001	

2. Non-written disclosures (Rule 70.9)

Kind of non-written disclosure	Date of non-written disclosure (day/month/year)	Date of written disclosure referring to non-written disclosure (day/month/year)

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of: V

Claim 4

All of the subject matters of claims 1-3 that claim 4 cites appear to be novel and to involve an inventive step.

Accordingly, the subject matter of claim 4 appears to be novel and to involve an inventive step.

Claim 5

All of the subject matters of claims 1-4 that claim 5 cites appear to be novel and to involve an inventive step.

Accordingly, the subject matter of claim 5 appears to be novel and to involve an inventive step.

Claims 8-23 and 31

A support stand-cum-connection part is not described in any of the above-mentioned documents.

Accordingly, the subject matters of claims 8-23 and 31 appear to be novel and to involve an inventive step.

Claim 24

A structure wherein the support column part can rotate on a slope line on a plane as an axis against a stand base is not described in any of the above-mentioned documents.

Accordingly, the subject matter of claim 24 appears to be novel and to involve an inventive step.

Claims 25-27

An angle-control part, one end of which is connected with the back of a display part via a rotatable part while the other end is capable of turning on the said rotatable part as a pivot, is not described in any of the above-mentioned documents.

Accordingly, the subject matters of claims 25-27 appear to be novel and to involve an inventive step.

Claims 28-30

A support stand-cum-angle-control part is not described in any of the above-mentioned documents.

Accordingly, the subject matters of claims 28-30 appear to be novel and to involve an inventive step.

Claim 32

An informing means of letting the user know when the angle between a support-stand part and a display part reaches a recommended value is not described in any of the above-mentioned documents.

Accordingly, the subject matter of claim 32 appears to be novel and to involve an inventive step.

Claim 33

All of the subject matters of claims 1-6, 8-21 and 25-32 that claim 33 cites appear to be novel and to involve an inventive step.

Accordingly, the subject matter of claim 33 appears to be novel and to involve an inventive step.

Claim 34

All of the subject matters of claims 1-6 and 8-33 that claim 34 cites appear to be novel and to involve an inventive step.

Accordingly, the subject matter of claim 34 appears to be novel and to involve an inventive step.

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.
Continuation of: V

Claims 35 and 36

Documents 1 and 2 describe a flat display part having an insertion/detachable part that can be inserted into and withdrawn from the column part of a support stand. It is a common practice to provide a holding part in apparatuses in general.

A display device with a remote-controller holder is described in documents 5-8. A design in which a remote-controller holder has a shape by which a remote controller can fit in the holder is commonly created. A tapered shape of a remote controller is described in document 8.

Accordingly, the subject matters of claims 35 and 36 do not appear to involve an inventive step in view of documents 1, 2 and 5-8.

Claim 37

An arrangement wherein a chargeable battery integrated in a display part is charged through a power-supply part when the display part is in the state of being supported in the column part of a support stand, is not described in any of the above-mentioned documents.

Accordingly, the subject matter of claim 37 appears to be novel and to involve an inventive step.

CLAIMS

1. A thin design display apparatus comprising:
a thin type display unit having a removable fitting part;
and

5 a stand/pillar structure having an insert space,
wherein the thin type display unit is supported by the
stand/pillar structure, by inserting the removable fitting
part into the insert space,

wherein the display unit has a power supply unit,
10 wherein the removable fitting part is specified to have
such an insert direction length that the supported state can
be established when the removable fitting part is inserted
into the stand/pillar structure, and,

wherein the removable fitting part of the display unit
15 can be pulled out from the stand/pillar structure.

2. The thin design display apparatus according to Claim
1, wherein the display unit has a grip handle which can be
gripped.

20 3. The thin design display apparatus according to Claim
1 or 2, wherein the stand/pillar structure has an insertion
guide for guiding the insertion of the removable fitting part
when the removable fitting part is inserted into the insert
25 space.

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4. The thin design display apparatus according to any one of Claims 1 to 3, wherein a cushioning member that abuts the removable fitting part when the display unit is supported by the stand/pillar structure so as to prevent the removable fitting part from swaying is provided inside the insert space of the stand/pillar structure.

5. The thin design display apparatus according to any one of Claims 1 to 4, wherein a front end of the removable fitting part with respect to an insertional direction is formed with an elastic member, and

an elastic member is arranged inside the insert space of the stand/pillar structure, in the vicinity opposing a front end of the removable fitting part when the display unit is supported by the stand/pillar structure.

6. A thin design display apparatus comprising:

a thin type display unit having a removable fitting part, and

a stand/pillar structure having an insert space, wherein the thin type display unit is supported by the stand/pillar structure, by inserting the removable fitting part into the insert space,

wherein the display unit includes a grip handle,

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wherein the stand/pillar structure includes an anti removal device for preventing removal of the removable fitting part and a removal prevention releasing device for canceling the anti removal device, and

5 wherein the removal prevention releasing device releases removal prevention of the removable fitting part by a force acting in the same direction as the removable fitting part is inserted into the stand/pillar structure.

10 7. A display unit detaching method, wherein a thin type display unit having a grip handle and a removable fitting part is supported by a stand/pillar structure, by inserting the removable fitting part into an insert space of the stand/pillar structure, and removal of the removable fitting
15 part is prevented by an anti removal device, comprising the steps of:

pulling up the grip handle so as to cause a force to act in the direction in which the removable fitting part is separated from the stand/pillar structure, and acting a force
20 on the anti removal device, at the same time, in the same direction as the removable fitting part is inserted into the stand/pillar structure, so as to detach the removable fitting part of the display unit from the stand/pillar structure.

25 8. A thin design display apparatus comprising:

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a thin type display unit having a stand-cum-joint; and
a stand/pillar structure having an insert space,
wherein the thin type display unit is supported by the
stand/pillar structure, by inserting the stand-cum-joint into
the insert space,

wherein the display apparatus can be used in a first
usage mode in which the display unit is supported by the
stand/pillar structure, and

wherein the display apparatus can be used in a second
usage mode in which the stand-cum-joint of the display unit
is pulled out from the stand/pillar structure and used as
a stand for supporting the display unit.

9. The thin design display apparatus according to Claim
8, wherein a backside of the display unit and one end of the
stand-cum-joint are connected by a rotational part that makes
them rotatable.

10. The thin design display apparatus according to Claim
8 or 9, wherein the display unit has a grip handle that can
be gripped.

11. The thin design display apparatus according to Claim
9 or 10, wherein a rotational axis of the rotational part
extends parallel to a width direction of the display unit,

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and

the stand-cum-joint is rotatable about the rotational axis from a position where a distal end is located on a bottom side of the display unit to a position where the distal end is located on a top side.

12. The thin design display apparatus according to any one of Claims 8 to 11, wherein the display unit incorporates a battery in a lower side.

13. The thin design display apparatus according to any one of Claims 9 to 13, further comprising an elevation angle restraining portion which defines different permissible ranges of an angle of elevation of the display unit relative to the stand-cum-joint, between that in the first usage mode and that in the second usage mode.

14. The thin design display apparatus according to any one of Claims 9 to 13, further comprising an indicating portion for informing a user of a fact that a pivot angle between the display unit and the stand-cum-joint is set at a recommended angle of elevation.

15. The thin design display apparatus according to any one of Claims 9 to 14, wherein the stand-cum-joint projects down

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below a bottom side of the display unit when a distal end of the stand-cum-joint is set at a downmost position on the bottom side of the display unit.

5 16. The thin design display apparatus according to any one of Claims 8 to 15, wherein a cross section of a distal end of the stand-cum-joint is an elongate shape which is longer in a direction of a rotational axis than in a direction perpendicular to the rotational axis.

10

17. The thin design display apparatus according to any one of Claims 8 to 16, wherein a cross section of the stand-cum-joint and the insert space of the stand-cum-joint are circular.

15

18. The thin design display apparatus according to any one of Claims 8 to 17, wherein the stand-cum-joint includes an anti removal means for preventing removal of the removable fitting part and a removal prevention releasing means for releasing the anti removal means.

20

19. The thin design display apparatus according to any one of Claims 8 to 18, wherein the stand-cum-joint includes an insert guide for guiding the stand-cum-joint when the stand-cum-joint is inserted into the insert space.

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20. The thin design display apparatus according to any one of Claims 8 to 19, wherein a cushioning member that abuts the stand-cum-joint so as to prevent the stand-cum-joint from swaying in the first usage mode is provided inside the insert space of the stand/pillar structure.

21. The thin design display apparatus according to any one of Claims 8 to 20, wherein the distal end of the stand-cum-joint is formed with an elastic member while an elastic member is arranged inside the insert space of the stand/pillar structure, in the vicinity opposing the distal end of the stand-cum-joint in the first usage mode.

22. The thin design display apparatus according to any one of Claims 8 to 21, wherein the grip handle has a fixture portion to be fixed to the display unit and a remote controller holder formed in such a shape that a remote controller for remote controlling the display unit fits therein.

23. The thin design display apparatus according to any one of Claims 8 to 22, wherein the grip handle and the stand-cum-joint are formed integrally as a joined structure that can be connected to the display unit.

24. The thin design display apparatus according to any one

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of Claims 1 to 6 and Claims 8 to 23, wherein the stand/pillar structure includes a stand base portion formed so as to be placed in contact with a flat plane and a pillar portion provided upright on the stand base portion, having the insert space; and the pillar portion is able to be rotatable relative to the stand base about an axis that is perpendicular to the flat plane.

25. A thin design display apparatus comprising:

a thin type display unit having an engaging portion capable of being engaged with a projection projected from a wall surface; and

an angle adjuster whose one end is connected to a backside of the display unit by means of a rotatable rotational part,

wherein the engaging portion is projected above a top side of the display unit.

26. A thin design display apparatus comprising:

a thin type display unit having an engaging portion capable of being engaged with a projection projected from a wall surface; and

an angle adjuster whose one end is connected to a backside of the display unit by means of a rotatable rotational part

wherein the engaging portion extending toward a distal end from a fixed end, fixed to the display unit has an

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inclination in a depth direction of the display unit, and
wherein a depth of the inclination is equal to or greater
than a depth dimension of the rotational part.

5 27. A liquid crystal display apparatus according to Claim
25 or 6, wherein the engaging portion has an annular
configuration.

28. A thin design display apparatus comprising:

10 a thin type display unit having a grip handle; and
a stand-cum-angle adjuster whose one end is connected
to a backside of the display unit by means of a rotatable
rotational part,

15 wherein the grip handle is arranged with its distal end
projected above a top side of the display unit and extends
from a fixed end fixed to the display unit to the distal end
so as to have an inclination in a depth direction of the display
unit,

20 wherein a depth of the inclination is equal to or greater
than the depth dimension of the rotational part,

wherein the display apparatus can be used in a first
usage mode in which the stand-cum-angle adjuster is used as
a stand for supporting the display unit, and

25 wherein the display apparatus can be used in a second
usage mode in which the grip handle is engaged with a projection

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projected from a wall surface.

29. The thin design display apparatus according to Claim 25 or 28, wherein the stand-cum-angle adjuster projects down below a bottom side of the display unit when the distal end of the stand-cum-angle adjuster is set at a downmost position on the bottom side of the display unit.

30. The thin design display apparatus according to any one of Claims 25 to 29, wherein the distal end of the stand-cum-angle adjuster is an elongate shape which is longer in a direction of a rotational axis than in a direction perpendicular to the rotational axis.

31. A thin design display apparatus comprising:
a thin type display unit having a grip handle; and
a stand-cum-joint whose one end is connected to a backside of the display unit by means of a rotatable rotational part,
wherein the display unit is supported by a stand/pillar structure, by inserting the stand-cum-joint into an insert space of the stand/pillar structure,

wherein the display apparatus can be used in a first usage mode in which the display unit is supported by the stand/pillar structure,

wherein the display apparatus can be used in a second

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usage mode in which the stand-cum-joint of the display unit is pulled out from the stand/pillar structure and used as a stand for supporting the display unit, and

wherein the display apparatus can be used in a third usage mode in which the stand-cum-joint of the display unit is pulled out from the stand/pillar structure and the grip handle is engaged with a projection projected from a wall surface.

32. A thin design display apparatus comprising:

a thin type display unit;

a stand structure whose one end is connected to a backside of the display unit by means of a rotatable rotational part; and

an indicating means for informing a user that an angle between the stand structure and the display unit has been set at a recommended elevation angle as a result of rotation of the stand structure.

33. The thin design display apparatus according to any one of Claims 1 to 6, 8 to 21 and 25 to 32, wherein the display unit has a remote controller holder formed in such a shape that a remote controller for remote controlling display of the display unit fits therein.

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34. The thin design display apparatus according to any one of Claims 1 to 6 and 8 to 33, further comprising a pair of semicircular speaker portions on the left and right of the display unit.

5

35. A thin design display apparatus comprising:

a thin type display unit having a grip handle;

a power supply unit capable of supplying electric power to the display unit; and

10

a remote controller holder formed in such a shape that a remote controller for remote controlling the display unit fits therein.

15

36. The thin design display apparatus according to Claim 27, wherein the remote controller has a configuration that tapers from one end to the other while the remote controller holder has a inclined configuration that tapers from a top to a bottom of the display unit.

20

37. A thin design display apparatus comprising:

a thin type display unit having a removable fitting part;

and

a stand/pillar structure having an insert space,

wherein the thin type display unit is supported by the

25

stand/pillar structure, by inserting the removable fitting

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part into the insert space,

wherein the removable fitting part of the display unit
can be pulled out from the stand/pillar structure,

5 wherein the display unit incorporates a chargeable
battery,

wherein the stand/pillar structure has a power supply
unit, and

10 wherein the chargeable battery incorporated in the
display unit is charged through the power supply unit when
the display unit is supported by the stand/pillar structure.

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CLAIMS

1. A thin design display apparatus comprising:

a thin type display unit having a removable fitting part;

and

5 a stand/pillar structure having an insert space,

wherein the thin type display unit is supported by the stand/pillar structure, by inserting the removable fitting part into the insert space, and

10 wherein the removable fitting part whose one end is connected to the display unit by means of a rotatable rotational part can be pulled out from the stand/pillar structure.

2. A thin design display apparatus comprising:

a thin type display unit having a removable fitting part;

15 and

a stand/pillar structure having an insert space,

wherein the thin type display unit is supported by the stand/pillar structure, by inserting the removable fitting part into the insert space,

20 wherein the display unit includes a grip handle which can be gripped,

wherein the removable fitting part of the display unit can be pulled out from the stand/pillar structure; and

25 wherein an anti removal device for preventing removal of the removable fitting part and a removal prevention

AMENDED SHEETS

releasing device for canceling the removal prevention against the removable fitting part by the anti removal device are included.

5 3. A thin design display apparatus comprising:

 a thin type display unit having a removable fitting part;

and

 a stand/pillar structure having an insert space,

 wherein the thin type display unit is supported by the
10 stand/pillar structure, by inserting the removable fitting
part into the insert space,

 wherein the removable fitting part of the display unit
can be pulled out from the stand/pillar structure, and

 wherein a front end of the removable fitting part with
15 respect to an insertional direction is formed with an elastic
member.

4. (Amended) The thin design display apparatus according
to any one of Claims 1 to 3, wherein one of the removable
20 fitting part and the insert space of the stand/pillar structure
has a recess and the other has a projection so as to guide
an insertional direction and removal by a cooperation of the
removable fitting part and the insert space of the stand/pillar
structure.

25

5. The thin design display apparatus according to any one of Claims 1 to 4, wherein a cushioning member that prevents the removable fitting part from swaying when the display unit is supported by the stand/pillar structure is provided inside the insert space of the stand/pillar structure.

6. A thin design display apparatus comprising:
a thin type display unit having a removable fitting part;
and

a stand/pillar structure having an insert space,
wherein the thin type display unit is supported by the stand/pillar structure, by inserting the removable fitting part into the insert space,

wherein the display unit includes a grip handle,

wherein the stand/pillar structure includes an anti removal device for preventing removal of the removable fitting part and a removal prevention releasing device for canceling the removal prevention against the removable fitting part by the anti removal device, and

wherein the removal prevention releasing device releases removal prevention of the removable fitting part by a force acting in the same direction as the removable fitting part is inserted into the stand/pillar structure.

7. A display unit detaching method, wherein a thin type

display unit having a grip handle and a removable fitting part is supported by a stand/pillar structure, by inserting the removable fitting part into an insert space of the stand/pillar structure, and removal of the removable fitting part is prevented by an anti removal device, comprising the steps of:

pulling up the grip handle so as to cause a force to act in the direction in which the removable fitting part is separated from the stand/pillar structure, and acting a force on the anti removal device, at the same time, in the same direction as the removable fitting part is inserted into the stand/pillar structure, so as to detach the removable fitting part of the display unit from the stand/pillar structure.

8. A thin design display apparatus comprising:

a thin type display unit having a stand-cum-joint; and a stand/pillar structure having an insert space,

wherein the thin type display unit is supported by the stand/pillar structure, by inserting the stand-cum-joint into the insert space,

wherein the display apparatus can be used in a first usage mode in which the display unit is supported by the stand/pillar structure, and

wherein the display apparatus can be used in a second usage mode in which the stand-cum-joint of the display unit

is pulled out from the stand/pillar structure and used as a stand for supporting the display unit.

9. The thin design display apparatus according to Claim
5 8, wherein a backside of the display unit and one end of the stand-cum-joint are connected by a rotational part that makes them rotatable.

10. The thin design display apparatus according to Claim
10 8 or 9, wherein the display unit has a grip handle that can be gripped.

11. The thin design display apparatus according to Claim
15 9 or 10, wherein a rotational axis of the rotational part extends parallel to a width direction of the display unit, and

the stand-cum-joint is rotatable about the rotational axis from a position where a distal end is located on a bottom side of the display unit to a position where the distal end
20 is located on a top side.

12. The thin design display apparatus according to any one of Claims 8 to 11, wherein the display unit incorporates a battery in a lower side.

13. (Amended) The thin design display apparatus according to any one of Claims 9 to 12, further comprising an elevation angle restraining portion which makes difference in permissible range of an angle of elevation of the display unit relative to the stand-cum-joint, between that in the first usage mode and that in the second usage mode.

14. The thin design display apparatus according to any one of Claims 9 to 13, further comprising an indicating means for informing a user of a fact that a pivot angle between the display unit and the stand-cum-joint is set at a recommended angle of elevation.

15. The thin design display apparatus according to any one of Claims 9 to 14, wherein the stand-cum-joint projects down below a bottom side of the display unit when a distal end of the stand-cum-joint is set at a downmost position on the bottom side of the display unit.

16. The thin design display apparatus according to any one of Claims 9 to 15, wherein a cross section of a distal end of the stand-cum-joint is an elongate shape which is longer in a direction of a rotational axis of the rotational part than in a direction perpendicular to the rotational axis.

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17. The thin design display apparatus according to any one of Claims 8 to 15, wherein a cross section of the stand-cum-joint and the insert space of the stand-cum-joint are circular.

5 18. The thin design display apparatus according to any one of Claims 8 to 17, wherein an anti removal device for preventing removal of the stand-cum-joint and a removal prevention releasing device for canceling the removal prevention against the stand-cum-joint by the anti removal device are included.

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19. The thin design display apparatus according to Claims 8 to 18, wherein one of the stand-cum-joint and the insert space of the stand/pillar structure has a recess and the other has a projection so as to guide an insertional direction and removal by a cooperation of the stand-cum-joint and the insert space of the stand/pillar structure.

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20. The thin design display apparatus according to any one of Claims 8 to 19, wherein a cushioning member that prevents the stand-cum-joint from swaying in the first usage mode is provided inside the insert space of the stand/pillar structure.

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21. The thin design display apparatus according to any one of Claims 8 to 20, wherein the distal end of the stand-cum-joint

25

is formed with an elastic member.

22. The thin design display apparatus according to any one of Claims 8 to 21, wherein the grip handle has a fixture portion to be fixed to the display unit and a remote controller holder for holding a remote controller for remote controlling the display unit in the fixture portion.

23. The thin design display apparatus according to any one of Claims 8 to 22, wherein the grip handle and the stand-cum-joint are formed in an integral manner as a joined structure that can be connected to the display unit.

24. The thin design display apparatus according to any one of Claims 1 to 6 and Claims 8 to 23, wherein the stand/pillar structure includes a stand base portion formed so as to be placed in contact with a flat plane and a pillar portion provided upright on the stand base portion, having the insert space; and the pillar portion is able to be rotatable relative to the stand base about an axis that is perpendicular to the flat plane.

25. A thin design display apparatus comprising:
an engaging portion capable of being engaged with a projection projected from a wall surface; and

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an angle adjuster of which one end is connected to a backside of a display unit by means of a rotational part and the other end is able to rotate on the rotational part as a fulcrum.

5

26. A thin design display apparatus comprising:

a thin type display unit having an engaging portion capable of being engaged with a projection projected from a wall surface; and

10

an angle adjuster of which one end is connected to a backside of the display unit by means of a rotational part and the other end is able to rotate on the rotational part as a fulcrum,

15

wherein the engaging portion extending toward a distal end from a fixed end, fixed to the display unit has an inclination in a depth direction of the display unit, and

wherein a depth of the inclination is equal to or greater than a depth dimension of the rotational part.

20

27. A thin design display apparatus according to Claim 25 or 26, wherein the engaging portion has an annular configuration.

28. (Amended) A thin design display apparatus comprising:

25

a thin type display unit having a grip handle; and

a stand-cum-angle adjuster whose one end is connected to the display unit by means of a rotatable rotational part,

wherein the display apparatus can be used in a first usage mode in which the stand-cum-angle adjuster is used as a stand for supporting the display unit, and

wherein the display apparatus can be used in a second usage mode in which the grip handle is engaged with a projection projected from a wall surface.

29. The thin design display apparatus according to Claim 28, wherein the stand-cum-angle adjuster projects down below a bottom side of the display unit when a distal end of the stand-cum-angle adjuster is set at a downmost position on the bottom side of the display unit.

30. (Amended) The thin design display apparatus according to Claim 28 or 29, wherein a cross section of the other end of the stand-cum-angle adjuster is an elongate shape which is longer in a direction of a rotational axis of the rotational part than in a direction perpendicular to the rotational axis.

31. A thin design display apparatus comprising:

a thin type display unit having a grip handle; and

a stand-cum-joint whose one end is connected to a backside of the display unit by means of a rotatable rotational part,

wherein the display unit is supported by a stand/pillar structure, by inserting the stand-cum-joint into an insert space of the stand/pillar structure,

5 wherein the display apparatus can be used in a first usage mode in which the display unit is supported by the stand/pillar structure,

10 wherein the display apparatus can be used in a second usage mode in which the stand-cum-joint of the display unit is pulled out from the stand/pillar structure and used as a stand for supporting the display unit, and

15 wherein the display apparatus can be used in a third usage mode in which the stand-cum-joint of the display unit is pulled out from the stand/pillar structure and the grip handle is engaged with a projection projected from a wall surface.

32. A thin design display apparatus comprising:

a thin type display unit;

20 a stand structure whose one end is connected to a backside of the display unit by means of a rotatable rotational part; and

25 an indicating means for informing a user that an angle between the stand structure and the display unit has been set at a recommended elevation angle as a result of rotation of the stand structure.

33. (Amended) The thin design display apparatus according to any one of Claims 1 to 6, Claims 8 to 21 and Claims 25 to 32, wherein the display unit has a remote controller holder for holding a remote controller for remote controlling display of the display unit.

34. The thin design display apparatus according to any one of Claims 1 to 6 and Claims 8 to 33, further comprising a pair of semicircular speaker portions on the left and right of the display unit.

35. (Amended) A thin design display apparatus comprising:
a thin type display unit having a removable fitting part that can be inserted into and removed from a stand/pillar structure,

wherein the display unit includes a grip handle which can be gripped and a remote controller holder for holding a remote controller for remote controlling the display unit.

36. The thin design display apparatus according to Claim 35, wherein the remote controller has a configuration that tapers from one end to the other while the remote controller holder has a inclined configuration that tapers from a top to a bottom of the display unit.

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37. A thin design display apparatus comprising:

a thin type display unit having a removable fitting part;

and

5 a stand/pillar structure having an insert space,

wherein the thin type display unit is supported by the
stand/pillar structure, by inserting the removable fitting
part into the insert space,

10 wherein the removable fitting part of the display unit
can be pulled out from the stand/pillar structure,

wherein the display unit incorporates a chargeable
battery,

wherein the stand/pillar structure has a power supply
unit, and

15 wherein the chargeable battery incorporated in the
display unit is charged through the power supply unit when
the display unit is supported by the stand/pillar structure.